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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,388	10/23/2003	Yuanning Chen	TI-35696	8478
23494	7590	04/11/2005	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265				LOUIE, WAI SING
			ART UNIT	PAPER NUMBER
			2814	

DATE MAILED: 04/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

P E

Notice of Allowability

Application No.	Applicant(s)	
10/692,388	CHEN ET AL.	
Examiner	Art Unit	
Wai-Sing Louie	2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 3/21/05.
2. The allowed claim(s) is/are 1-14, 21 and 22.
3. The drawings filed on 23 October 2003 are accepted by the Examiner.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some* c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 1) hereto or 2) to Paper No./Mail Date _____.
(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
 Paper No./Mail Date _____.
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
 Paper No./Mail Date 10/23/03
4. Examiner's Comment Regarding Requirement for Deposit
 of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
 Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the claims

Cancel claims 15-20.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

The claimed invention is a method of forming a transistor having a gate structure formed upon a substrate, comprising:

- Forming a first layer of nitride material over the gate structure and portions of the substrate adjacent the gate structure;
- Forming a layer of material having a relatively low dielectric constant over the first nitride layer;
- Patterning the low dielectric constant material to form low dielectric constant sidewall spacers adjacent the gate structure;

- Forming a second layer of nitride material over the first nitride layer and the low dielectric constant sidewall spacers;
- Patterning the first and second nitride layers so that the low dielectric constant sidewall spacers are encapsulated by nitride materials; and
- Doping portions of the substrate adjacent the gate structure to form source/drain regions therein, the sidewall spacers guiding dopant into select portions of the substrate.

The prior art of record does not disclose or suggest either in singly or in combination the following limitations and other elements in the claims:

- Reference Gardner et al. (US 6,121,631) do not disclose the first insulating layer is nitride material; the encapsulated sidewall is low dielectric constant material; and the second insulating layer is nitride material.
- Reference Matsunaga (US 6,392,310) do not disclose the middle sidewall is completely encapsulated; the encapsulated sidewall is low dielectric constant material; and the second insulating layer is nitride material.

Therefore, the above references do not disclose the claimed invention of present application and claims 1-14 and 21-22 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wai-Sing Louie whose telephone number is (571) 272-1709. The examiner can normally be reached on 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wsl
April 7, 2005.

LONG PHAM
PRIMARY EXAMINER